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## Mixed Methods Studies in Health Promotion: A Case-Study Based on the Life Situations of Young People of Refugee Backgrounds in Germany

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#### Abstract

Mixed Methods Studies, which combine qualitative and quantitative research methods, are widely used across disciplines. However, in health promotion, quantitative methods dominate in most cases and qualitative methods are considered as an 'add on'. By means of a Mixed Methods Study about the living situation of young people from refugee backgrounds, aged between 11 and 21 years, in an administrative district in Germany, in which quantitative and qualitative research methods are considered coequal, the issue of Mixed Methods Studies potential in health promotion is discussed. In this study, the perspectives of the young people from refugee backgrounds, their social workers from youth welfare office and local providers have been gathered. The young people from refugee backgrounds and their social workers have been consulted with a qualitative interview, whereas the local providers have been consulted in a standardised manner. The combination of qualitative and quantitative research methods to analyse the living situation of young people from refugee backgrounds gives a holistic and comprehensive insight in social, cultural and structural frame conditions, social policy's challenges as well as individual requirements. Such Mixed Methods Studies prove suitable for health-related research, especially when it comes to quickly changing structural conditions, a difficultly accessible target group and highly personal issues.

**Keywords:** mixed methods study, young people from refugee backgrounds, qualitative methods, quantitative methods, health promotion

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## 1. Introduction

Mixed Methods Studies—which combine qualitative and quantitative research methods—are now being utilised in many different disciplines [1, 6, 8, 18, 21, 26]. Standardised surveys are used in many cases, and qualitative interviews are then added as preliminary studies or for more in-depth research [40, 41]. The epistemological potential of Mixed Method Studies in which qualitative and quantitative research methods are combined with equal weighting is hardly ever considered or taken into account [25].

This potential for knowledge will be examined in this chapter based on a specific example project. On behalf of the administrative district of Göppingen (Baden-Württemberg, Germany), a Mixed Methods Study was carried out in 2016/2017 into the life situations of young people from refugee backgrounds aged between 11 and 21 years old [5, 37]. This Mixed Methods Study looked into the views of young people from refugee backgrounds, their social workers from the youth welfare office and the providers of programmes and services in the administrative district. Qualitative interviews were used to survey the young people from refugee backgrounds and their social workers. The providers of programmes and services were surveyed using a standardised questionnaire. The combination of qualitative and quantitative research methods provides a holistic and comprehensive insight into the contextual and framework conditions, as well as the socio-political challenges and individual requirements. This study demonstrated that Mixed Methods Studies in which qualitative and quantitative studies are given equal weighting represent a suitable strategy for researching issues dealing with health promotion, especially with respect to sensitive subjects and difficulty to reach target groups.

An overview of the use and dissemination of Mixed Method Studies in health promotion will firstly be provided. An example study on the life situations of young people from refugee backgrounds will then be used to discuss the potential offered by Mixed Methods Studies for health promotion when the qualitative and quantitative methods are given equal weighting.

### 2. Methods in health promotion

Health promotion utilises a very broad range of methods due to its interdisciplinary nature and the different approaches found in the fields of natural sciences, medicine, social sciences and psychology [6, 9, 18, 21]. The various disciplines each apply their own research methods depending on the research topic, the acquisition of epistemic knowledge and the available resources.

The terms qualitative and quantitative research methods are utilised across all disciplines [1, 4]. They are umbrella terms for a conglomerate of research methods, approaches and analyses. Quantitative research methods can be described as numeric, standardised, deductive and hypothesis testing methods that explain structures and processes from an external perspective [4]. Qualitative research methods can be described as inductive, interpretive and hypothesis generating methods that can be understood and reconstructed from an emic, internal perspective [1–5].

However, the fact that both qualitative and quantitative methods have their strengths yet also characteristic 'blind spots' is undisputed. These blind spots include, for example, replicability in the case of qualitative methods and the analysis of rarer or more extreme research groups in the case of quantitative methods. In order to also utilise the relevant strengths of quantitative and qualitative research methods and minimise any possible weaknesses, the use of so-called Mixed Methods Studies has become increasingly established over the last few years [6–9].

#### 2.1. Definition of mixed methods studies

Mixed Methods Studies are now a standard feature of empirical research [10]. This is demonstrated by various discussions and methodological work in the social sciences and education [11], social work [12] and nursing, rehabilitation and care sciences [1, 4, 13, 14]. In relevant textbooks on these subjects, chapters have been added on Mixed Methods Studies [15, 16] or dedicated textbooks on this subject have been published [17]. Its international relevance is demonstrated by the Journal of Mixed Methods which was published for the first time in 2007, books such as the 'Handbook of mixed methods in social and behavioural research' [18] or the 'Handbook of Multimethod and Mixed Methods Research' [19], as well as the 'Mixed Methods Research Association' (MMIRA).

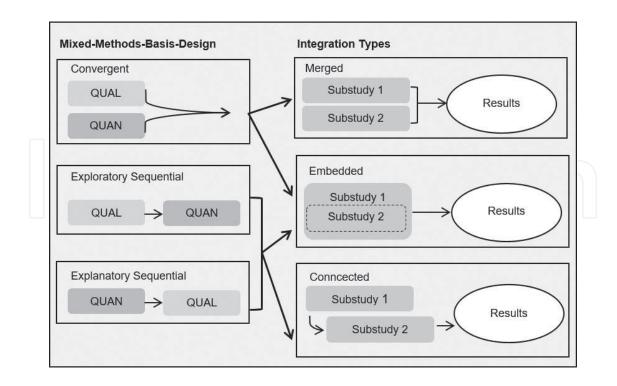
In general, mixed methods mean combining or integrating qualitative and quantitative research.

'Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches [...] for the broad purposes of breadth and depth of understanding and corroboration' [20].

At a methodological level, there are various different research designs that differ according to their chronological order, the weighting of the qualitative and quantitative elements and the sampling strategies [11]. Three basic designs are typically found in current methodological discussions [9, 16, 21, 22] (see **Figure 1**):

- convergent or concurrent design: qualitative and quantitative substudies are carried out, at the same time where relevant, and their results are interpreted in relation to one another. The research is combined at the results level (merging the data).
- exploratory sequential design: a qualitative preliminary study is carried out and evaluated in this case. The results are then used to develop a quantitative study. The methods are combined here when applying the methods (building the data).
- explanatory sequential design: The central aspect here is the completion and evaluation of a quantitative study, followed by a subsequent qualitative study for the purposes of more in-depth research or to clarify any unexpected findings. The substudies are also combined in this case when applying the methods (explaining the data).

A common argument for the use of mixed methods designs is the ability to use the strengths of one method to compensate for the weaknesses of another. Accordingly, the mixed methods



**Figure 1.** Mixed-methods-basis-designs (based on [9] explanation: QUAN = quantitative component, QUAL = qualitative component, components represent the qualitative or quantitative component, depending on their sequence in the research design.

design developed by Udo Kelle has become the established model in Germany. He emphasises that the methodological weaknesses of one method can be compensated for through a combination of two or more methods [11]. In a similar way, other authors postulate, for example, that it is possible to use mixed methods to gain a better understanding of the research issue [13]. Creswell [22] summarises the research potential of combining qualitative and quantitative methods as follows:

- obtain two different perspectives;
- obtain a more comprehensive view and more data about the problem than a single perspective;
- add to instrument data details about the setting and context;
- conduct preliminary exploration with individuals to make sure that interventions fit the participants and the site being studied;
- add qualitative data to experimental trials by identifying participants to recruit and interventions to use and carrying out follow-up to further explain the outcomes.

However, it is also emphasised that Mixed Methods Studies do not represent a new gold standard but rather ONE alternative from all possible empirical approaches [12]. The role that Mixed Methods Studies play in health promotion is described in the following section.

#### 2.2. Mixed methods studies in health promotion

The potential for knowledge and insight provided by Mixed Methods Studies offers a diverse range of highly promising opportunities for research work in health promotion [6, 9, 18, 21]. Since the Ottawa Charter was adopted by the World Health Organisation in 1986, health promotion has been viewed as a concept that can be applied when analysing the health resources and potential of an individual, as well as at all social levels. It is a complex social and health policy approach that influences an individual person's life skills and the capacity to take action, empowers people to improve their health and yet also deals with sustainable changes to social, cultural, political and economic relationships.

Health promotion thus stands, on the one hand, for subject-related guidance focussing on, among other things, subjective perceptions, individual behaviour and personal skills, while on the other hand, it deals with social, political or economic relationships that provide the framework for a health-promoting lifestyle and are explicitly explained using the settings-based approach. For a holistic, empirical analysis in the context of health promotion, it is thus important to focus on all levels (micro, meso and macro). Health promotion is also subject to constant change. Changes to ordinances and laws (e.g. the German Prevention Act in 2016), technical innovations (e.g. health apps, prosthetic devices), trends in nutrition and consumption (e.g. vegan diets) or also new target groups (such as, e.g. more than 1 million refugees that came to Germany in 2015 [23]) alter the framework conditions and efficiency levels of health promotion interventions. Gathering knowledge about these causal and sometimes changing conditions is a strength of Mixed Methods Studies [6].

Mixed Methods Studies have been increasingly utilised in health promotion over the last few years [40, 41]. In the process, experimental designs have often been used [26]. Studies have been carried out using standardised questionnaires, diagnostic tests or instrument-based methods, always acknowledging the primacy of evidence-based practices [24]. In the context of this research, qualitative studies were mainly used in the form of preliminary studies or for more in-depth research into unexpected effects [25, 26]. The potential and possibilities offered by qualitative research methods were often not fully exploited in these Mixed Methods Studies [27].

The following section presents a Mixed Methods Study about the life situations and wellbeing of young people from refugee backgrounds and the potential offered by Mixed Methods Studies in which the qualitative and quantitative methods are given equal weighting will then be discussed based on this example. Other examples to illustrate this type of research can be found in Kelle and Krones [6] and Kelle et al. [1].

#### 2.3. A mixed methods study on young people from refugee backgrounds

#### 2.3.1. Background

Germany experienced an enormous increase in immigration due to asylum seekers in 2015. During this phase that was described as the 'refugee crisis', more than 1 million refugees and

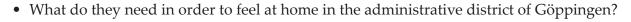
migrants travelled to Germany [23]. Germany is now faced with the political and social challenge of providing for and integrating these people from refugee backgrounds.

A particularly vulnerable target group in this context is young people and minors (in some cases unaccompanied) from refugee backgrounds. More than 300,000 children and young people [28] travelled to Germany from abroad in 2015, of which around 45,000 were unaccompanied [29]. A larger number of the unaccompanied minors who travelled to Germany were male [30]. The majority of the minors were 16 or 17 years old when they entered the country. The main countries of origin were Afghanistan, Syria, Iraq, Eritrea and Somalia. Other countries of origin were Morocco, Iran, Gambia, Guinea, Pakistan and Bangladesh [31].

Young people from refugee backgrounds are an important target group for academic research and society. Research into their life situations, well-being and needs is an important basis for successful and sustainable integration. A comprehensive empirical analysis thus needs to take into account relationships at a meso- and macro-level, as well as the subject-based perspective at a micro-level. In this context, Mixed Methods Studies, where qualitative and quantitative research methods are given equal weighting, offer great potential for multifaceted and in-depth analysis.

This type of Mixed Methods Study was carried out in the administrative district of Göppingen (Baden-Württemberg, Germany) in 2016/2017 (see **Figure 2**). The background to this study was a youth welfare planning process for young people from refugee backgrounds between the ages of 11 and 21 years old. The central research questions were as follows:

- How do the young people from refugee backgrounds living in the administrative district of Göppingen feel?
- What are their current life situations and, above all, what do the everyday lives and leisure time of young people from refugee backgrounds in the administrative district of Göppingen look like?



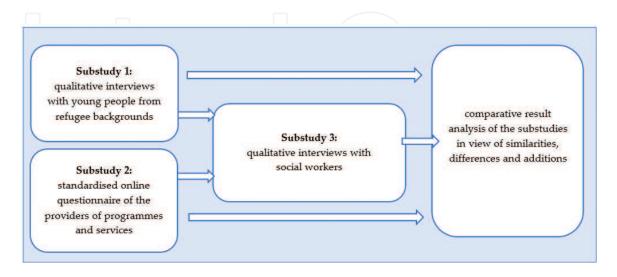


Figure 2. Mixed methods study about the life situations of young people from refugee backgrounds [5].

#### 2.3.2. Methodological challenges

The central objective of this study was primarily to place the focus on the views of the young people from refugee backgrounds and gather information on their subjective points of view. Yet, this posed a challenge from a methodological perspective. Important reasons were as follows:

- **1.** The young people spoke no or very little German at the time of the survey: The target group for the study were young people from the 'refugee crisis' in 2015 shortly after their arrival in Germany or their host municipality. As these people had only lived in Germany for a short period of time, linguistic restrictions were a priori assumed.
- 2. The asylum procedures were still ongoing at the time of the study, which meant that the young people were uncertain about whether they could remain in Germany and possibly felt a certain dependency on the German system. Other empirical studies have confirmed that, in view of the refugee's precarious life experiences during asylum that are controlled by outside forces, researchers tend to be perceived as powerful and presumably influential people by refugees [32]. People from refugee backgrounds are afraid that everything they say could have a potentially negative impact on the outcome of the asylum proceedings [32]. This highlights the ethical responsibility of the researchers to clearly explain the academic goals of the study, maintain academic and ethical standards and, where relevant, not to fuel any false hope about the outcome of the asylum process.
- 3. The young people's experiences in fleeing their native countries demonstrated, on the one hand, their resilience and survival skills yet, on the other hand, opened up the risk of traumatic experiences. Addressing these possibly traumatic experiences cannot be the task of a researcher but it nevertheless needs to be taken into account in the design and implementation of a survey. The interviewers were usually asked in the qualitative interviews to show a respectful level of interest when traumatic experiences were mentioned and, if relevant, to sensitively ask about them but not to probe the interviewees further [33].
- 4. The young people from refugee backgrounds had only lived in the administrative district of Göppingen for a few months at the time of the survey. Therefore, it was unclear how familiar they were with the administrative district or, for example, whether they were at all aware of any corresponding programmes or services for their specific target group (e.g. leisure activities).
- **5.** The young people presumably have little or no experience with academia and research. The basic prerequisite for an insightful interview is the trust of the interviewee [34, 35]. When dealing with interviewees of a young age, their friends were allowed to be present for this reason. Others recommend participatory observation in advance for the purpose of getting to know each other and building up trust [34, 35]. This option was not possible within the framework of this study (also for reasons of limited resources). Therefore, it was unclear to what extent the young refugees would be willing to provide a previously unknown researcher with insights into their everyday lives during the interview.

These reasons explained the need to use a relatively open survey that promoted as much trust as possible. This is why a qualitative tool was used — a guideline-based, problem-centred interview, which enabled a certain level of comparability between the answers due to the use of key questions but also allowed space for reflexivity and the new and unexpected. It was not possible for the interviews to be conducted by multilingual interviewers in this study because it was not possible to find suitable people with the available resources at the time of the interviews. However, volunteer interpreters in the relevant native languages were available for the interviews. The interviews were conducted by Master's students in the field of health promotion, who were specifically selected due to their age and specialist background. They received intensive training in advance to develop their interviewing skills and remained in close contact with the research team and each other. The students documented their experiences in a postscriptum after each interview and discussed them within the group of interviewers. This primarily involved reflecting on their own role in the interview and giving their impression of the openness of the young people and their cooperation with the interpreter.

Non-linguistic tools were explicitly integrated into the qualitative interviews. The young people brought personal possessions along to the interviews and were asked during them to draw the so-called mind maps comprising important objects or people in their everyday lives. One goal here was to casually ease the interviewee into the conversation. In addition, the objects that were drawn or brought along by the interviewee were used as a contextual anchor for the conversation.

#### 2.3.3. The survey process and random sampling

A total of 10 **qualitative interviews with young people from refugee backgrounds** were conducted. The interviewees were between 15 and 19 years old; nine of them were male and one was female. They came from various different countries (including Afghanistan, Syria, Iraq and Gambia). Four of the young people lived with their families and other refugees in shared accommodation, while six of them were unaccompanied minors living in accommodation provided by the youth welfare office. All of the interviews were carried out on a voluntary basis, were digitally recorded after obtaining the person's permission and the German sections of the text were transcribed word for word. The interviews were analysed using a qualitative analysis of their content, in which the most important categories were inductively filtered out of the material and then collected together and analysed [36, 37]. In the course of this inductive analysis, the interviews were considered on a case-by-case basis and also in comparison to one another. The categories were primarily designed to reflect the everyday lives and leisure activities of the young people from refugee backgrounds.

In parallel to the interviews of the young people from refugee backgrounds, a **standardised online questionnaire of the providers of programmes and services in the administrative district** of Göppingen was carried out. The objective was to take stock of the existing and planned programmes and services for the target group of young people from refugee backgrounds aged between 11 and 21 years old. This enabled the framework conditions, that is, the structural and local conditions, to be systematically recorded. There are more than 100 providers of programmes and services in the administrative district of Göppingen, of which there are 38

municipalities/cities, around 18 official asylum working groups, around 20 youth welfare providers and 20 schools with preparatory classes and six vocational colleges (as of October 2016). A total of 67 questionnaires were completed. Twenty-two questionnaires were received from the administrative district/municipalities, 18 from youth welfare providers, 11 from schools or educational institutions and 15 from 'other sources', which mainly comprised volunteer groups.

In order to supplement and consolidate the results of both analyses, **three qualitative guideline-based interviews with social workers from independent youth welfare agencies and the social welfare office** were conducted. Both groups of social workers are intensively involved with young people from refugee backgrounds and thus have a good overview of the current situation. However, the two groups of social workers have very different perspectives about the life situations of young people from refugee backgrounds. The social workers from the social welfare office are responsible for the accompanied young people from refugee backgrounds in community housing and those from the youth welfare office are responsible for the unaccompanied young people from refugee backgrounds who are cared for in children's homes provided by the youth welfare office. In order to ensure the maximum level of comparability, the guidelines and categories used for the analysis were strongly based on the interviews with the young people from refugee backgrounds.

The study about young people from refugee backgrounds represented an explorative Mixed Methods Study in which the qualitative and quantitative methods were given equal weighting. The goal of the Mixed Methods Study was to gain a comprehensive, holistic and multiperspective insight for the purposes of analysing the life situations of young refugees. The different substudies were carried out in a coordinated but independent way. The two substudies involving the young people from refugee backgrounds and the providers of programmes and services were carried out in parallel, while the survey of the social workers was completed afterwards. The guidelines for the survey of the social workers were based on the findings of the previous studies. This meant there was a 'mixing' process on two levels: in the application methods because the guidelines for the survey of the social workers utilised the previous findings, and also in the analysis of the results in which the findings from the three surveys were considered in relation to one another and with equal weighting. Similarities, additions and differences were then identified with the aid of summary tables, the so-called joint displays (see Figure 1 [37]).

# 2.4. Results of the mixed methods study on young people from refugee backgrounds

The in-depth results of this study on young people from refugee backgrounds cannot be presented here in detail (further information can be found in [37]). However, it is possible to summarise the key results of all three substudies in five points:

- The young people from refugee backgrounds generally feel happy in the administrative district of Göppingen.
- They want to remain permanently in the administrative district and build a 'normal' life with their own apartments, jobs and later their own families.

- In order to guarantee the permanent integration of the young people from refugee backgrounds, it is necessary to make (further) adjustments to the framework conditions. The providers of programmes and services require, among other things, money, rooms, employees with the necessary intercultural skills and volunteer support to offer broad and low-threshold programmes and services.
- The young people from refugee backgrounds require 'peaceful retreats', meaning places where they can withdraw and feel safe. These opportunities have not been available to them to a sufficient degree up to now.
- In addition, they require young and capable counterparts who can support them on their path and who are ideally at a similar phase of life to the refugees themselves.

Overall, the analysis of the current target-specific programmes and interventions identified the structures and processes at the meso-level of the providers of programmes and services. The evaluations of the interviews with the young people from refugee backgrounds and their social workers demonstrated the need for individual analysis on a case-by-case basis at a macro-level. They clearly demonstrated that a typical young refugee does not exist but rather it is necessary to reflect on individual life histories, relevancies and interpretative models. Specific differences in relation to gender and origin were particularly evident. In particular, accompanied young girls are difficult to reach with offers of potential leisure activities because they are already occupied with household and family duties. Young boys from Afghanistan and Syria appear to be comparatively active according to their social workers, while young boys from central African countries are more passive. The young people themselves often spoke in the interviews about anxiety disorders and concentration problems due to worries about their asylum application being rejected.

From a methodological perspective, the three substudies revealed convergent (=concordant) and complementary (=reciprocal) findings. However, the systematic comparison of the substudies also revealed different areas of tension (see [37]), the resolution of which is not part of the research assignment but rather the responsibility of the administrative district of Göppingen. Three areas of tension are presented here by way of example:

- 1. The standardised questionnaire for the providers of programmes and services demonstrated that a series of target group-specific measures have been delivered since the 'refugee crisis' and the majority of providers are also planning and implementing further measures. Yet, the young people from refugee backgrounds made it very clear in the interviews that they do not want any 'round-the-clock' care. Instead, they are looking for places to retreat that offer them the opportunity for calm and self-reflection.
- 2. The interviews with the young people from refugee backgrounds indicated that they visit a doctor relatively frequently. However, the medical reasons and necessities were difficult to comprehend in the interviews. The interviews with the social workers were an additional opportunity for acquiring relevant knowledge in this area. They made it clear that these young people perceive some illnesses, which are considered normal for young people who grow up in Germany, as life-threatening. The reason for this is that they had

not been aware of some of these illnesses in the past. This is particularly true of symptoms related to colds and flu, such as sniffles or coughing.

**3.** The social workers believe that the young people are better housed in the countryside because the social structures, particularly the leisure activities, are better developed and it is thus easier for the young people to come into contact with the local population. However, the young people would prefer to live in the city where there is something to do, the distances are short, there are places with free Wi-Fi and there tend to be spaces to retreat and learn (such as the city library).

In conclusion, the multiperspective analysis of the everyday lives and leisure activities of young people from refugee backgrounds delivered results that support and supplement one another. The identification of possible areas of tension during the planning and implementation of interventions and programmes/services for young people from refugee backgrounds appears to be particularly important so that they are met with an appropriate level of acceptance and willingness to implement them from all stakeholders involved.

# 2.5. Gaining knowledge and insights from mixed methods studies in health promotion

Mixed Methods Studies in which qualitative and quantitative methods have equal weighting offer great potential for health promotion. The prerequisite is that the choice of qualitative and quantitative research methods is appropriate to the subject matter, case-specific and based on epistemological principles. This does not 'only' mean qualitative preliminary studies in the form of standardised questionnaires. Even if the relevance of this design, especially for the development of questionnaires, is not disputed, it does not do justice to the possible insights that could be gained from Mixed Methods Studies in health promotion with a larger weighting toward qualitative studies. This potential exists at the following levels (also see here [5, 6]):

- **1.** For a holistic, comprehensive and multifaceted empirical analysis: Mixed Methods Studies enable a holistic settings analysis by integrating micro-, meso- and macro-levels. At a meso- and macro-level, it is standardised processes above all that offer great potential because they take into account political regulations, structural conditions or demographic processes. The qualitative studies enable an analysis at a micro-level due to their greater focus on the subject.
- 2. Analysing marginalised target groups who are difficult to reach linguistically: Health promotion often deals with marginalised and/or difficult to reach target groups, such as children and young people but also people with certain illnesses or disabilities. Studying these target groups is often a challenge because this research requires a certain level of mutual trust, and purely linguistic-based studies quickly reveal their limitations. Greater weighting could be given to qualitative processes in these cases.
- **3.** To find out why interventions have a different effect than anticipated: For example, the frequency of use and motivation of the participants can be studied quantitatively but qualitative

methods are needed to find out why they are perhaps used in a different way than originally hoped. In addition, a combination of participatory processes can be used to include those affected and other citizens in the development, implementation and evaluation of measures for health promotion.

- 4. To identify complex and changing causal conditions: Complex causal conditions can be studied using quantitative experimental settings. However, these processes reveal their limitations when structures change, new target groups appear or social change occurs. Qualitative methods offer great potential in this area because they are more open and place a greater focus on the subject.
- **5.** To analyse sensitive and personal subjects: Especially in the health sector, the focus is often placed on intimate and personal issues, which generates problems related to social or cultural desirability when studied using standardised questionnaires. Qualitative interviews and group discussions (e.g. focus groups) which bring together social groups or persons from similar backgrounds can provide support in this area.

In general, this potential also exists in all areas of health promotion, for both status and need assessments and also for intervention and evaluation studies. This is because the effectiveness of health-promoting interventions is always also dependent on social and cultural aspects. These factors are associated with, for example, questions about the accessibility of the target groups or the lasting effects on attitudes, motivation and behaviour. In addition, purely satisfaction-based surveys using standardised questionnaires often paint a too positive picture because those surveyed tend to give socially desirable answers [1].

Mixed Methods Studies can generally call on the whole repertoire of qualitative and quantitative methods. Previous experience demonstrates that, in the case of marginalised groups in particular, the integration of qualitative observation methods is sensible because it allows for initial contact between the researcher and the research subjects [1]. In addition, participatory processes such as photovoice or community mapping appear very promising because they enable collective reflection processes in everyday life and the world of work to be studied [38]. Focus groups—an example of a qualitative group process—enable the social environment to be analysed by integrating representatives from the relevant groups [39].

## 3. Conclusions

Mixed Methods Studies in which qualitative and quantitative research methods are combined with equal weighting have proved themselves to be a suitable research strategy especially for subject-oriented, environment-based health promotion but also for specific settings-based questions. In the study about the living situation of young people from refugee background, the qualitative interviews enable the subjective perspective, and the standardised online questionnaire of the providers of programmes and services shows the institutional and structural conditions for a living in Göppingen. Mixed Methods Studies enable a holistic and multifaceted empirical understanding, can be used to explain the causes of certain actions, take into account the environment of those affected and capture the subjective sense behind actions or decisions. Depending on the survey method used, they also enable the participation of the target group and take into account a holistic settings-based approach in which a bottom-up-or top-down-oriented process is possible.

Mixed Methods Studies with a priori equal weighting of qualitative and quantitative research methods offer great potential not only for status and needs assessments but also for intervention and evaluation studies in health promotion. The associated multiperspective analysis enables the subject-oriented development of interventions that take into account contextual and framework conditions, social and technical innovations, and individual causal attributions. Therefore, the results of the Mixed Methods Study about the living situation of young people from refugee backgrounds can be used to develop and distinguish interventions for health promoting and integration. In addition, these types of studies allow for the participation of difficult to reach or marginalised target groups, such as refugees, people with disabilities and sick people. This makes the implementation of effective and more sustainable interventions more likely.

## **Conflict of interest**

M. Niederberger and M. Keller declare that no conflicts of interest exist. All interviews were completed voluntary, made anonymous and the interviewees were informed about the further use of the data for academic research. The study was carried out in accordance with the principles of ethical research.

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